I claim:

1. A method for data transmission in a communication system, which comprises:

using a transmitting station to transmit data in structured frames in a manner such that, in at least one continuos interruption phase, a receiving station receiving the transmitted data can interrupt performing an operation selected from the group consisting of receiving the transmitted data and processing the transmitted data and can perform at least one other function;

configuring the at least one continuous interruption phase to extend over at least a portion of a first frame and over at least a portion of a second frame that is successive to the first frame.

2. The method according to claim 1, which comprises configuring the at least one continuous interruption phase to extend over a boundary between the first frame and the second frame, and transmitting data in the first frame before the interruption phase and transmitting data in the second frame after the interruption phase.

3. The method according to claim 1, which comprises:

transmitting the data at an essentially constant permanent transmission rate, except for the data that are received immediately preceding and immediately following the at least one continuous interruption phase;

transmitting the data that are to be received immediately preceding the at least one continuous interruption phase at a transmission rate that is higher than the essentially constant permanent transmission rate; and

transmitting the data that are to be received immediately following the at least one continuous interruption phase at a transmission rate that is higher than the essentially constant permanent transmission rate.

4.   The method according to claim 3, which comprises:

transmitting the data that are to be received immediately preceding the at least one continuous interruption phase within boundaries of the first frame; and

transmitting the data that are to be received immediately following the at least one continuous interruption phase within boundaries of the second frame.

5.   The method according to claim 3, which comprises:

coding the data jointly, in each case, with data to be transmitted before and/or afterward over a superposition period having an essentially predetermined superposition length and transmitting the data superimposed upon one another;

transmitting the data to be received immediately preceding the at least one continuous interruption phase over less than one superposition length at the higher transmission rate; and

transmitting the data to be received immediately following the at least one continuous interruption phase over less than one superposition length at the higher transmission rate.

6. The method according to claim 3, which comprises:

transmitting the data that are to be received immediately preceding the at least one continuous interruption phase at the same transmission rate as the data that are to be received immediately following the at least one continuous interruption phase.

7. The method according to claim 1, which comprises:

transmitting the data redundantly with an essentially constant standard redundancy factor, except for the data that are received immediately preceding and immediately following the at least one continuous interruption phase;

transmitting the data that are to be received immediately preceding the at least one continuous interruption phase with a redundancy factor that is lower than the standard redundancy factor; and

transmitting the data that are to be received immediately following the at least one continuous interruption phase with a redundancy factor that is lower than the standard redundancy factor.

8. The method according to claim 7, which comprises:

transmitting the data that are to be received immediately preceding the at least one continuous interruption phase within boundaries of the first frame; and

transmitting the data that are to be received immediately following the at least one continuous interruption phase within boundaries of the second frame.

9. The method according to claim 7, which comprises:

coding the data jointly, in each case, with data to be transmitted before and/or afterward over a superposition period having an essentially predetermined superposition length and transmitting the data superimposed upon one another;

transmitting the data to be received immediately preceding the at least one continuous interruption phase over less than one superposition length at the higher transmission rate; and

transmitting the data to be received immediately following the at least one continuous interruption phase over less than one superposition length at the higher transmission rate.

10. The method according to claim 7, which comprises:

transmitting the data that are to be received immediately preceding and immediately following the at least one continuous interruption phase with the same redundancy factor.

11. The method according to claim 1, which comprises:

configuring the at least one continuous interruption phase to extend over a portion of the first frame having a size that is

equal to a size of the portion of the second frame that the at least one continuous interruption phase extends over.

12. The method as claimed according to claim 1, which comprises:

distributing a plurality of continuous interruption phases in constantly recurring time intervals in at least one higher-level multiframe that includes a plurality of frames; and

using the receiving station to interrupt performing an operation selected from the group consisting of receiving the transmitted data and processing the transmitted data during the plurality of continuous interruption phases.

13. The method as claimed according to claim 1, which comprises:

configuring a plurality of multiframes such that each of the multiframes includes a predetermined number of frames;

configuring a plurality of continuous interruption phases such that an interruption phase extends recurringly in a given position of one of the plurality of multiframes; and

using the receiving station to interrupt performing an

operation selected from the group consisting of receiving the

transmitted data and processing the transmitted data during

the plurality of continuous interruption phases.

14.   The method according to claim 1, which comprises using

the transmitting station to transmit the data such that no

data transmitted by it arrive at the receiving station during

the at least one continuous interruption phase.

15.   The method according to claim 1, wherein the at least one

other function performed by the receiving station includes

carrying out a measurement with a receiving device.

16.   The method according to claim 1, which comprises

providing the transmitting station and the receiving station

as components of a CDMA mobile radio system.

17. The method according to claim 1, which comprises:

constructing the receiving station to receive the transmitted

data; and

constructing the receiving station such that during the at

least one continuos interruption phase, the receiving station

can interrupt performing an operation selected from the group

consisting of receiving the transmitted data and processing the transmitted data.

18. The method according to claim 1, which using a base station of a mobile radio system as the transmitting station.